



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

|                 |             |                      |                     |
|-----------------|-------------|----------------------|---------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|

EXAMINER

ART UNIT

PAPER NUMBER

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

08/952,996

Applicant(s)

Leijon et al.

Examiner

Enad, Elvin

Group Art Unit

2834



☒ Responsive to communication(s) filed on Aug 4, 2000

☐ This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-29 and 31-44 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-29 and 31-44 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2834

## DETAILED ACTION

### *Continued Prosecution Application*

1. The request filed on August 4, 2000, for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 08/952,996 is acceptable and a CPA has been established. An action on the CPA follows.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9,11,15-29,31 and 32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant Disclosed Prior Art Figure 3 in view of Shildneck (USP 3,014,139) and further in view of Elton et al. (USP 5,036,165).

Prior art figure 3 discloses the claimed invention except for having a winding comprising of an insulation system and at least two semiconducting layers, the layers having substantially the same coefficient of thermal expansion.

Shildneck teaches that it is known to use a cable winding in a dynamo-electric machine. Shildneck discloses an improved continuous winding for an electromagnetic device such as a large turbine-driven generator, the winding employing an improved form of flexible insulated conductor for the laminated armature core of the dynamo-electric machine. In addition, Elton et al. teach

Art Unit: 2834

that it is known to have an electrical cable comprising an internal grading layer of semi-conducting pyrolyzed glass fiber layer in electrical contact with the cable conductor. In another form of embodiment, Elton et al. teach an electrical cable provided with an exterior layer of internal grading layer of semi-conducting pyrolyzed glass fiber layer in contact with an exterior cable insulator with a predetermined reference potential.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the cable assembly of Shildneck having semiconducting layers as taught by Elton et al. to the device as disclosed in prior art figure 3 since such a modification according to Elton et al. would provide a conductor which prohibits the development of corona discharge.

4. In regard to forming the semiconducting layer with the same coefficient of thermal expansion as that of the insulation layer, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed these layers with similar coefficients since it was known in the art that the expansion rate of the two layers would be the same and this is desirable in order to prevent cracking of the insulation and wear between the two.

5. Claims 10 and 33-44 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant Disclose prior art Figure 3 in view of Shildneck (USP 3,014,139) and Elton et al. (USP 5,036,165) and further in view of Takaoka et al. (USP 5,094,703).

Art Unit: 2834

Prior art figure 3, Shildneck and Elton et al. disclose the claimed invention except for a teaching of having the strands of the electrical conductor comprised of insulated and uninsulated windings.

Takaoka et al., as seen in figures 7,8,10 and 11 teach having a stranded conductor for an electrical cable comprising a combination of uninsulated stranded conductor and an insulated stranded conductor.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the teaching of Takaoka et al. having insulated and uninsulated electrical conductor strands and to have modified the device of Elton et al. since such a modification would reduce the amount of insulation needed minimizing assembly and production costs.

6. Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant Disclose prior art Figure 3 in view of Shildneck (USP 3,014,139) and Elton et al. (USP 5,036,165) and further in view of Breitenbach et al. (USP 4,785,138).

Prior art figure 3 and Elton et al. disclose the claimed invention except for a teaching of having metal screen and sheath in the cable.

Breitenbach et al. teach that it is known to utilize metal screen and sheath in the cable. It would have been obvious to one having ordinary skill in the art at the time the invention was made to used the arrangement of Breitenbach et al. to the device of as disclosed by Elton et al. since such a modification according to Breitenbach et al. in column 4, lines 59-69 would provide

Art Unit: 2834

mechanical protection and electrical shield for the cable.

7. Claims 13 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant Disclose prior art Figure 3 in view of Shildneck (USP 3,014,139) and Elton et al. (USP 5,036,165) and further in view Lauw (USP 4,982,147).

Prior art figure 3 and Elton et al. disclose the claimed invention except for a teaching of having or not having a step-up transformer in the system device.

Lauw in column 6, lines 50-52 teach that use of transformers to step-up or step down the voltage are contingent upon the requirements of the application. In this instant application, having a voltage higher than 30kV-36kV, it would have been an obvious matter of design choice to one having ordinary skill in the art to utilize a step-up transformer in order to increase and meet the required voltage in the application.

### *Conclusion*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elvin Enad whose telephone number is (703) 308-7619. The examiner can normally be reached on Monday-Friday from 8:00AM to 4:00PM.

Art Unit: 2834

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez, can be reached on (703) 308-1371. The fax phone number for this Tech Center is (703) 305-3431(32).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Elvin Enad  
Primary Examiner  
Art Unit 2834  
09.05.2000